

What is claimed is:

1. A method for forming an anti-glare layer, comprising the step of:

ejecting droplets of an ink with an ink-jet apparatus onto a transparent substrate so as to form a microscopically roughened structure on the transparent substrate,

wherein the ink contains an ingredient capable of giving an anti-glare property to the transparent substrate.

2. The method for forming an anti-glare layer of claim 1, wherein the microscopically roughened structure has a center line mean roughness (Ra) of 0.05 - 5.0 μm .

3. The method for forming an anti-glare layer of claim 1, wherein the microscopically roughened structure contains 1 to 50 peaks having a height (a) of 0.5 to 10 μm per 100 μm^2 , provided that each height (a) is determined from a bottom of the peak.

4. The method for forming an anti-glare layer of claim 1, wherein the ingredient capable of giving an anti-glare

property to the transparent substrate is an actinic radiation curable resin.

5. The method for forming an anti-glare layer of claim 1, further comprising the step of:

exposing an actinic radiation on the transparent substrate after the ejection step is finished.

6. The method for forming an anti-glare layer of claim 1, wherein the ingredient capable of giving an anti-glare property to the transparent substrate is a heat curable resin.

7. The method for forming an anti-glare layer of claim 6, further comprising the step of:

heating the droplets of the ink on the transparent substrate so as to cure the jetted droplets of the ink.

8. The method for forming an anti-glare layer of claim 1, wherein at least two kinds of inks having different compositions from each other are ejected so as to form peaks of different refractive index.

9. The method for forming an anti-glare layer of claim 1, wherein (i) at least two kinds of inks having different compositions from each other are ejected; and

(ii) the ejected droplets of inks having different compositions have a different particle diameter from each other.

10. The method for forming an anti-glare layer of claim 9, wherein a first microscopically roughened structure is formed on the transparent substrate employing droplets of a first ink, then a second microscopically roughened structure is formed employing droplets of a second ink, a diameter of the droplets produced with the first ink is larger than a diameter of the droplets produced with the second ink.

11. The method for forming an anti-glare layer of claim 1, wherein the ink droplet contains a particle having a smaller diameter than a diameter of the ink droplet.

12. The method for forming an anti-glare layer of claim 11, wherein the particle in the ink droplet is a liquid particle.

13. The method for forming an anti-glare layer of claim 12, wherein a difference of a refractive index between the liquid particle and a medium used in the ink is at least 0.01.

14. The method for forming an anti-glare layer of claim 1, wherein an ink-jet head section in the ink-jet apparatus is subjected to micro-vibration so that ink droplets are randomly deposited onto the transparent substrate during the ink ejection step.

15. The method for forming an anti-glare layer of claim 1, wherein the transparent substrate has at least one hard-coat layer thereon, and the droplets of an ink is ejected onto the hard-coat layer.

16. The method for forming an anti-glare layer of claim 15, wherein the hard-coat layer is semi-cured, and then the droplets of an ink is ejected onto the semi-cured hard-coat layer.

17. The method for forming an anti-glare layer of claim 15, wherein the hard-coat layer is subjected to a plasma

treatment, and then the droplets of an ink is ejected onto the plasma treated hard-coat layer.

18. The method for forming an anti-glare layer of claim 15, wherein the hard-coat layer incorporates a plasticizer.

19. A method for producing an anti-glare film comprising the anti-glare layer formed on the transparent substrate by the method of claim 1.

20. The method for producing an anti-glare film of claim 19,

wherein an anti-reflection layer is further provided on the anti-glare layer.

21. An anti-glare film produced by the method of claim 19.

22. An ink-jet apparatus for producing an anti-glare film of claim 21,

wherein the ink-jet apparatus is provided with an actinic radiation exposure section or a heating section which is disposed in such a manner that actinic radiation or heat is not directly applied to an ink jet head section.

23. A polarizing plate comprising the anti-glare film of claim 21.

24. A display device comprising the polarizing plate of claim 23.